

10 March 1959

MEMORANDUM FOR: C/PP/FMD

ATTENTION :

25X1

SUBJECT : Special C-54 Aircraft Cargo Doors

1. On 3 July 1958 a request was received from PP/AIRD for the fabrication of five (5) sets of inward opening cargo doors for the C-54 type aircraft. These doors will enable air crews to safely open and close the cargo opening while in flight for aerial dispatching purposes. As a result of this request a research and development effort leading to the fabrication and installation of the initial prototype inward opening cargo doors was undertaken in August 1958. In addition, the inward opening door arrangement was altered to allow for a larger exit opening. The increased exit width will permit the use of larger air drop bundles. Upon satisfactory installation of the prototype inward opening cargo doors, four (4) additional door sets in kit form will be fabricated for field installation by air crews, requiring hand tools only.

2. A concurrent program was also initiated to provide an aerial dispatching conveyor, compatible with either the standard or inward opening cargo doors. This program was requested by C/PP Staff for the ZIMMERMAN project.

3. At present there are no inward opening cargo doors installed in any C-54 aircraft. Consequently a capacity does not exist for using the inward opening type of cargo door.

4. Initial installation of the prototype inward opening cargo doors was scheduled for mid January 1959. Due to an urgent request from PP/FMD, a concentrated effort was made to complete the aerial dispatching conveyor program. This effort, unfortunately, was at the expense of the inward opening cargo door project and resulted in rescheduling the prototype cargo door installation for March 1959.

5. At this time a decision was made to abandon the initially conceived dispatching conveyor and redesign an aerial dispatching conveyor to be used in conjunction with the inward opening cargo doors only. From this standpoint it appeared desirable to coordinate the aerial dispatching conveyor and prototype inward opening cargo door programs for dual installation.

25X1

CONFIDENTIAL

6. In addition, a mock-up of the aircraft door section was deemed necessary as a final check point to insure minimum installation time and proper door to airframe alignment prior to actual cargo door installation. This mock-up will be used for the initial prototype and all consequent inward opening cargo door kits.

7. Approval for funds necessary for the mock-up fabrication, over-run expenditures, and design changes, deterred the inward opening cargo door program approximately one month, resulting in an April installation date for the prototype door.

8. Some manufacturing time was lost due to unforeseen changes in the initial design of the inward opening cargo doors. At the present time the week of 4 May 1959 has been definitely established for installation of the aerial dispatching conveyor and the prototype inward opening cargo doors, pending aircraft availability. The above date is based upon the contractor's normal work rate. Delivery of the four (4) additional inward opening cargo door kits is scheduled as follows:

- a. Second door set - mid July
- b. Third door set - first August
- c. Fourth door set - mid August
- d. Fifth door set - first September

The lag time between the initial prototype door installation and delivery of the first kit (second door set) is necessary in order to complete the installation instructions, fabricate details, and provide rework time if required.

9. This resume of the progress being made on the inward opening cargo doors was requested by [redacted]. Our project engineer, [redacted] has maintained liaison with [redacted] on the aerial dispatching conveyor and with [redacted] on the cargo doors. TSS/Engineering Division is under the impression that the 4 May 1959 installation date for the inward opening cargo door prototype is satisfactory. Concurrence to this effect would be greatly appreciated.

25X1
25X1

[redacted]
Chief
TSS/Engineering Division

25X1

DD/P/TSS/ED/[redacted]mt

25X1